

NASA Space Telerobotics Program

Cool Robot Of The Week

The honor of being listed as "Cool Robot Of The Week" is bestowed upon those robotics-related web sites which portray highly innovative solutions to robotics problems, describe unique approaches to implementing robotics system, or present exciting interfaces for the dissemination of robotics-related information or promoting robotics technology. This award carries absolutely no monetary value, official recognition, assumed support, or tangible benefit, other than swamping your web site with a few dozen extra hits for a week. But everyone else was putting up their "Cool Site Of The Millenia" lists, so we figured it was our turn too...

This week's selection:

Set 04

<u>Golem Project</u> - an "artifical life" project from <u>Brandeis University DEMO lab</u> studying the automatic design and manufacture of robotic lifeforms (see the <u>Washington Post article here</u>).

Previous Cool

Aug 28	RoboCup 2000 - Fourth Robot World Cup Soccer Games and Conferences, taking
	place this week in Melbourne (see the <u>current scores here</u>).

- Aug 21 Aug 21 Autosub a UK project to develop unmanned autonomous underwater vehicles technology for advanced marine science.
- Aug 14 M2000 paint-stripping robot for cleaning super tankers, a development of the National Robotics Engineering Consortium.
- Aug 07

 Many-Robot Systems description of an ONR Space and Naval Warfare Systems

 Center project conducted between 1992 and 1995 to investigate some of the system-level issues associated with multi-agent systems.
- Jul 31 Jijo-II office conversant mobile robot.
- Jul 24 <u>Gastronome</u> a prototype meat-eating robot, part of the University of South Florida <u>Gastrobotics Project</u>. And you thought the <u>Slugbot</u> was bad!
- Jul 17 Lorpex prototype planetary exploration robot that combines robotics technology with In-Situ Resource Utilization (ISRU), from the University of Arizona Space Engineering Research Center.

NavChair - an assistive navigation system for wheelchairs based upon mobile robot Jul 10 obstacle avoidance, developed at the University of Michigan Mobile Robotics Lab (also check out the follow-on work known as GuideCane). K-9 - Mars rover prototype and field test program to integrate and demonstrate robotic Jul 03 technologies for future Mars missions. Robonaut - robotic astronaut surrogate for space operations, under development by the **Jun 26** NASA Johnson Space Center (see the Robonaut stories on Yahoo! and CNN). Half Fish, Half Robot - story from New Scientist Magazine, reporting on the first Jun 19 animal-robot hybrid. Miller's SnakeBots - describes several generations of snakebot reserach by Dr. Gavin Jun 12 Miller, who is collaborating with the NASA Ames Serpentine Robotics Project. BEAM Millenium Robot Games 2000 - This year, WCRG joins forces with the Jun 05 world-established BEAM International Robot Games, to make this year's event truly world-class RoboCup-Euro 2000 - First RoboCup European Championship and Conference, May 29 RoboCup-Euro 2000 Amsterdam (see an overview of the rules and set-up here). Snakebot - hyper-redundant, serpentine robots composed of simple low degree of May 22 freedom modules, under evaluation for possible space applications. Evolution of Machines - polymorphic robot concepts have been around for a while, but this project at Brandeis University is one of the first efforts to progrees from pure May 15 simulation to physical implementation (check out the related article from New Scientist). LePot - a giant robotic flower pot that autonomously drives around on a Swiss May 08 administration building roof top (check out the 24-hour time lapse video). SpaceCat - a stepping triple-wheel robot for potential planetary exploration, part of the May 01 ROSA Project at the Swiss Federal Institute of Technology Lausanne Autonomous Systems Lab. RoboRama 2000 - description of the annual robotics competition hosted by the Dallas Apr 24 Personal Robotics Group, along with the results page SUBMAR - societies of underwater robots for internal monitoring and control, from the Apr 17 Helsinki University of Technology Automation Technology Laboratory. Foothill High School and NASA Ames Research Center & Vintage High School and NASA Ames Research Center and NAPA Pipe & Briston Meyers Squibb North Brunswick Township High School - winners of the National Championships, and Apr 10 Mountain Home High School and Baxter Healthcare Corporation - winners of the Chairman's Award, at the 2000 FIRST Robotics Competition held last weekend in Orlando.

Salamander - "the robotic sludge crawler project" - with a name like that, we just

couldn't resist!

Apr 03

Cool Robot Of The Week SNUF - simple autonomous mobile robot constructed of second-hand components -Mar 27 includes a complete description of the utilized architecture and downloadable code. Robotics Webring - A web ring established as a simple way to find robotics and Mar 20 electrical engineering content on the web. RobOnWeb - A project at the Autonomous Systems Lab of the Swiss Federal Institut of Mar 13 Technology in Lausanne (Switzerland) which aims to develop new concepts for teleoperation of mobile robots through the World Wide Web. Robotics Education Project - NASA-sponsored efforts to develop K-12 curricula in Mar 06 robotics education. Robot Pike - An MIT project to build a robotic fish, to understand the complex fluid Feb 28 mechanics that fish use to propel themselves. PETS - from the University of Maryland Autonomous Mobile Robotics Lab, the Personal Electronic Teller of Stories may be the future of household robotics - where Feb 21 the user builds the robot to suit their mood (or task), rather than selecting a pre-defined robotic solution for the task at hand. Thing - from the University of Massachusetts Laboratory for Perceptual Robotics, it's a Feb 14 four-legged walker, it's a robotic hand, it's a globe-twirler... (it's a floor polish, it's a desert topping.... [SNL fans will get that one]) RCX Internals - a very detailed description of the Lego Mindstorms RCX controller, Feb 07 which provides a great start for experiemnting with modifications/extensions to the RCX hardware and software. MVACS RA - the Mars Polar Lander (MPL) may have disappeared when it reached Jan 31 Mars, but the flight spare robotic arm developed for MPL is still being run through it's paces in tests recently conducted in Death Valley. Jan 24 Troody - a fully contained 3D bipedal walking dinosaur robot, from the MIT Leg Lab. CRIP - collective robotics intelligence project from the University of Alberta Computer Jan 17 Vision and Robotics Research Group. Nomad - robotic search for Antarctic meteorites, deployed this week to Elephant Jan 10 Moraine for the 2000 field test - see additional info and daily reports here along with the New York Times story. ** 01/23/2000 Update ** Nomad found a meteorite! Mind control of robots - a demonstration of direct control of a robot manipulator from a

Note: indicates the organization is developing technologies for space applications of robotics

rat's brain (draw your own analogies regarding robot control from a grad students'

Check out the 1999 cool...

brain).

Jan 03

Check out the 1998 cool...



Check out the 1997 cool...



Check out the 1996 cool...





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Please email the site webmaster with any comments, criticisms or corrections for this page.

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